A New Dalechampia L. (Euphorbiaceae) from Southern Costa Rica

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ABSTRACT. A new species of *Dalechampia* L. (Euphorbiaceae) with 5-foliolate leaves is described from southern Costa Rica, compared with its closest relative, and illustrated.

RESUMEN. Una nueva especie de *Dalechampia* L. (Euphorbiaceae) con hojas 5-folioladas, se describe de la región sur de Costa Rica, se compara con otra especie cercana y se ilustra en este artículo.

Dalechampia L. is a genus of about 115 mostly neotropical species (Burger & Huft, 1995). Eleven species have recently been accounted for in Costa Rica (Burger & Huft, 1995). Except for D. spathulata (Scheidweiler) Baillon, an erect subshrub, the Costa Rican taxa are clambering vines with leaves that vary from simple and unlobed, with 5 palmate veins, to 2–3-lobed, and to trifoliolate. A new Dalechampia with 5-foliolate leaves from southern Costa Rica is described below.

Dalechampia burgeriana Gómez-Laurito, sp. nov. TYPE: Costa Rica. Puntarenas. Coto Brus, Fila Cruces, entrada de los Atunes y orilla de la quebrada, borde de bosque, pastizales y charrales, 1000–1200 m, 24 July 1995, Isidro Chacón 279 (holotype, USJ; isotypes, CR, F, MO). Figure 1.

Dalechampia regnellii species brasiliensis affinis, a qua imprimis differt basi asymmetrici foliolorum lateralium, stipulis involucralibus 8–10 mm longis, bracteis involucralibus majoribus, sepalis pistillatis 12, ovario glabro, fructu majore.

Clambering vines, leafy stems 1–1.3 mm thick, with retrorse appressed hairs and spreading stinging bristles 1–1.5 mm long; stipules 8–10 mm long, 1.5–2 mm wide at the base, narrowly lanceolate, ciliate along the margin, with 6–7 ascending veins, persisting. Leaves 5-foliolate, petioles 3–10 cm long, ca. 1 mm thick with retrorse appressed hairs and spreading trichomes, stipels stipule-like; petiolules 3–10 mm long with antrorse appressed hairs; leaflets with blades 6.5–10.5 cm long, 2–2.5 cm wide, narrowly ellipticoblong to narrowly ovate-elliptic, apex acuminate, margin with short teeth, lateral leaflets asymmetric

at the base with a rounded-truncate side and a cuneate side, sparsely pilose on both surfaces, especially on the veins beneath; venation pinnate with 7-8 pairs of major secondary veins. Inflorescence axillary, solitary on axillary short-shoots 4-7 cm long; short-shoots with retrorse appressed hairs and 1-3 reduced leaves, involucral stipules 8-10 mm long, 1.5-2 mm wide at the base, narrowly lanceolate, pilose along the margin, with 6-7 ascending veins; involucral bracts 4-5.5 cm long, 3-3.5 cm wide, ovate and 5-lobed, yellowish green, with 7-9 major veins from base, the veins sparsely ciliate outside and strigillose with short appressed hairs on the inner surface, the margin ciliate and with short teeth. Staminate cymules pedunculate, peduncules 3-5 mm long, flattened, sparsely pubescent, involucel cupuliform, 2.5-4 mm long, 6-8 mm wide, with the bracts completely connate; pedicels 3-6 mm long; resiniferous bractlets laminar, margins entire, secreting sticky whitish resin; staminate flowers 8-9; bud oblongelliptic, 2 mm long, 1-1.2 mm broad, acute at tip; calyx lobes 4, becoming reflexed, staminal column 2 mm long, glabrescent, anthers ca. 12, crowded, subsessile, 0.8 mm long, bilocular and dehiscent longitudinally. Pistillate cymules sessile, involucel of 2 bractlets; bractlets glabrous, margins sinuate, densely ciliate with hairs to 1 mm long; pistillate flowers 3, very short-pedunculate at anthesis; peduncles ca. 1 mm long; sepals 12, 3-4.5 mm long, 1-1.5 mm broad, bipinnatifid, margins hispid; ovary ca. 2 mm high, 1.5 mm thick, glabrous, 3locular; stylar column straight, terete, 12-15 mm long, 0.5 mm thick, glabrous, cream-colored, tip slightly dilated and sometimes slightly downturned. Central fruiting-pedicel 2-2.5 cm long, laterals 10-12 mm long; fruiting sepals 12-16 mm long, margins, tentacular processes, and midstrip copiously beset with straight, sharp bristles 1-2 mm long. Capsule 12-14 mm diam., glabrous; columella 12-15 mm long, persisting; seeds globose, ca. 4 mm diam., rugose-verrucate, whitish, palered tinged.

This new species is named in honor of William C. Burger, long-time friend and devoted student of

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Figure 1. Dalechampia burgeriana Gómez-Laurito (I. Chacón 279). —A. Habit. —B. Inflorescence at anthesis. —C. Staminate and pistillate cymules.

Costa Rican plants. His contributions to our knowledge of the Costa Rican flora have already been significant through his *Flora Costaricensis* publications.

Dalechampia burgeriana, with its 5-foliolate leaves, involucel of completely connate bracts, and

resiniferous bractlets of staminate pleiochasium with entire margins belongs to section *Dalechampia* subsect. *Triphyllae* as delimited by Webster and Armbruster (1991). *Dalechampia burgeriana* may be related to *D. regnellii* Mueller-Argoviensis, another species with 5-foliolate leaves, from southern

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Brazil (Pax & Hoffmann, 1919; Webster & Armbruster, 1991). However, D. burgeriana differs from D. regnellii in having lateral leaflets asymmetric at the base, involucral stipules only 8-10 mm long, stipels similar to the stipules, involucral bracts 4-4.5 cm long, pistillate flowers with 12 sepals, glabrous ovary, and capsule 12-14 mm in diameter vs. lateral leaflets cuneate at base, involucral stipules 25 mm long, stipels reduced or subulate, involucral bracts 2.5 cm long, pistillate flowers with 10 sepals, pubescent ovary, and capsule 8 mm in diameter in D. regnellii. Dalechampia burgeriana is known only from the type locality, at the edge of premontane forest, in the subtropical, tropical very wet biotic unit with 1-2 dry months, according to Herrera and Gómez (1993).

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